

In the Claims

Place
into
N7Bm
c/n

1. (Currently Amended) An isolated and purified protein constituting a mammalian neuronal cationic ASIC channel that is sensitive to amiloride and activated by protons, comprising an amino acid sequence is selected from the group consisting of SEQ ID NO: 2, SEQ ID NO: 4, and SEQ ID NO: 8.

2.-10. (Canceled)

11. (Previously Presented) An isolated and purified nucleic acid molecule comprising the nucleic acid sequence coding for the protein according to claim 1.

12. (Previously Presented) The nucleic acid molecule according to claim 11, comprising the nucleic acid sequence bounded by nucleotides 123 and 1700, inclusive, of the sequence represented in SEQ ID NO: 1.

13. (Previously Presented) The nucleic acid molecule according to claim 11, comprising the nucleic acid sequence bounded by nucleotides 1 and 1542, inclusive, of SEQ ID NO: 3.

14. (Canceled)

15. (Previously Presented) The nucleic acid molecule according to claim 11, comprising the nucleic acid sequence bounded by nucleotides 109 and 1785, inclusive, of SEQ ID NO: 7.

16. (Canceled)

17. (Previously Presented) A vector comprising at least one nucleic acid molecule according to claim 11, combined with control sequences.